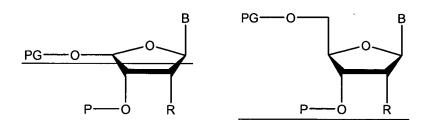
Application No.: 10/033195 Docket No.: AFMX-P01-042

AMENDMENTS TO THE CLAIMS

1-56. (Canceled)

- 57. (Currently Amended) A compound having a photoremovable protecting group covalently attached to a C-3' or C-5' oxygen atom, wherein said compound is selected from the group consisting of a natural or synthetic unnatural nucleoside or a natural or synthetic unnatural nucleoside having an activated phosphorus group.
- 58. (Previously Presented) A compound of Claim 57, wherein said oxygen atom is a C-3' oxygen of a ribonucleoside phosphoramidite or a ribonucleoside H-phosphonate.
- 59. (Currently Amended) A compound of Claim 58, wherein said oxygen atom is a C3' C-3' oxygen of a ribonucleoside deoxyribonucleotide deoxyribonucleoside phosphoramidite or a deoxyribonucleoside H-phosphonate.
- 60. (Previously Presented) A compound of Claim 57, wherein said oxygen atom is a C-3' oxygen of a natural nucleoside phosphoramidite.
- 61. (Currently Amended) A compound of Claim 57, having the formula:



wherein

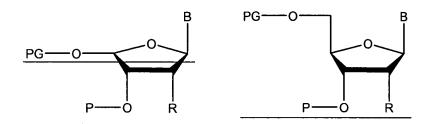
B is selected from the group consisting of natural or synthetic adenine, natural or synthetic guanine, natural or synthetic thymine, natural or synthetic cytosine, and natural or synthetic uracil;

R is selected from the group consisting of hydrogen, protected hydroxy, halogen and alkoxy;

P is an activated phosphorus group, and

PG is photoremovable protected protecting group selected from the group consisting of NVOC, MeNPOC, NPOC, MenVOC MenVOC and phrenylmethyloxycarbon pyrenylmethyloxycarbonyl.

- 62. (Previously Presented) A compound of Claim 61, wherein R is hydrogen or protected hydroxy.
- 63. (Currently Amended) A compound of Claim 61, wherein P is selected from the group consisting of N,N-dialkyl-O-methylphosphoramidite phosphoramidite, phosphochloridite, an H-phosphonate group and an N,N-dialkyl-O-(2-cyanoethyl)phosphoramidite a 2-cyanoethylphosphoramidite group.
- 64. (Previously Presented) A compound of Claim 61, wherein B is selected from the group consisting of adenine, thymine, uracil, cytosine and guanine.
- 65. (Currently Amended) A compound of Claim 61, wherein B is selected from the group consisting of adenine, thymine, uracil, cytosine and guanine, R is hydrogen or protected hydroxy, or alkoxy, P is a 2-cyanoethlyphosphoramidite an N,N-dialkyl-O-(2-cyanoethyl)phosphoramidite group.
- 66. (Currently Amended) A compound of Claim 57, having the formula:



wherein

Application No.: 10/033195 Docket No.: AFMX-P01-042

B is selected from the group consisting of natural or synthetic adenine, natural or synthetic guanine, natural or synthetic thymine, natural or synthetic cytosine, and natural or synthetic uracil;

R is selected from the group consisting of hydrogen, protected hydroxy, halogen and alkoxy;

P is an activated phosphorus group, and

- PG is photoremovable protected protecting group selected from the group consisting of NVOC, MeNPOC, NPOC, MenVOC MenVOC and phrenylmethyloxycarbon pyrenylmethyloxycarbonyl.
- 67. (Previously Presented) A compound of Claim 66, wherein R is hydrogen or protected hydroxy.
- 68. (Currently Amended) A compound of Claim 66, wherein P is N,N-dialkyl-O-methylphosphoramidite phosphoramidite, or phosphochloridite, or an H-phosphonate group or a 2 cyanoethylphosphoramidite an N,N-dialkyl-O-(2-cyanoethyl)phosphoramidite group.
- 69. (Previously Presented) A compound of Claim 66, wherein B is selected from the group consisting of adenine, thymine, uracil, cytosine and guanine.
- 70. (Currently Amended) A compound of Claim 66, wherein B is selected from the group consisting of adenine, thymine, uracil, cytosine and guanine, R is hydrogen or protected hydroxy, or alkoxy, P is a 2-cyanoethlyphosphoramidite an N,N-dialkyl-O-(2-cyanoethyl)phosphoramidite group.
- 71. (Currently Amended) A method for preparing a compound of Claim 57, said method comprising attaching a photoremovable protecting group to the C-3' or C-5'oxygen atom of a natural or synthetic unnatural nucleoside and subsequently attaching an activated phosphorous group to the remaining C-3' or C-5' oxygen atom.

Application No.: 10/033195 Docket No.: AFMX-P01-042

72. (Currently Amended) A method of Claim 71, wherein said compound is selected from the group consisting of natural <u>nucleoside</u> phosphoramidites and natural nucleoside H-phosphonates.

- 73. (Currently Amended) A method of Claim 71, wherein said compound is selected from the group consisting of natural deoxribonucleoside deoxyribonucleoside phosphoramidites.
- 74. (Canceled)